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[54] **THIN-FILM ELECTROLUMINESCENCE DEVICE FOR DISPLAYING MULTIPLE COLORS WITH GROOVE FOR CAPTURING ADHESIVE**

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[52] **U.S. Cl.** **313/512**; 313/509; 313/112

[58] **Field of Search** 313/502, 503, 506, 509, 313/512, 112, 408

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[57] **ABSTRACT**

A thin-film electroluminescence (EL) device capable of displaying multiple colors has a laminated structure wherein back electrodes in stripes, a lower dielectric layer, a luminescence layer, an upper dielectric layer and transparent electrodes in stripes are sequentially formed on a transparent substrate in this order. The back electrodes intersect the transparent electrodes at right angles, and areas of the device where the back electrodes confront the transparent electrodes form picture elements. This device also has at least first and second color filters. The first and second filters are placed not only in corresponding picture-element areas of the transparent electrodes, but also in non-picture-element areas of the transparent electrodes and an upper dielectric layer such that the first color filter overlaps the second color filter in the non-picture-element areas. The first and second color filters in combination have transmissivities to visible lights similar to those of a black filter, thereby restraining external light coming to the non-picture-element areas from being reflected. Further, the device can include a groove in a transparent sealing plate formed above the transparent electrode. The transparent sealing plate is bonded to the transparent substrate with an adhesive and the groove captures excess adhesive to avoid interference between the adhesive and the picture elements.

4 Claims, 10 Drawing Sheets